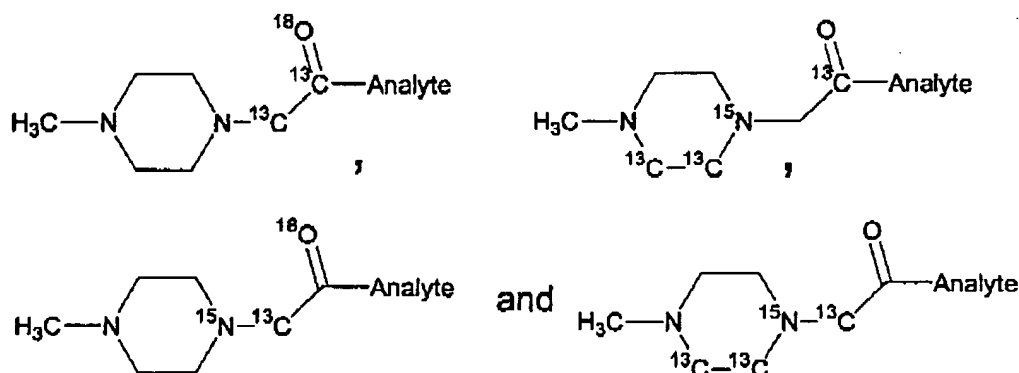


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II. AMENDMENT

Claims 1-6 (Canceled)

7. (Currently Amended) A mixture of comprising fragment ions of derived by fragmentation of the same analyte labeled with two or more different isobaric labels, wherein ions of the labeled analytes were selected for fragmentation and further analysis in a tandem mass spectrometer, and wherein at least two of the labeled analytes are compounds of a formula selected from the group consisting of:

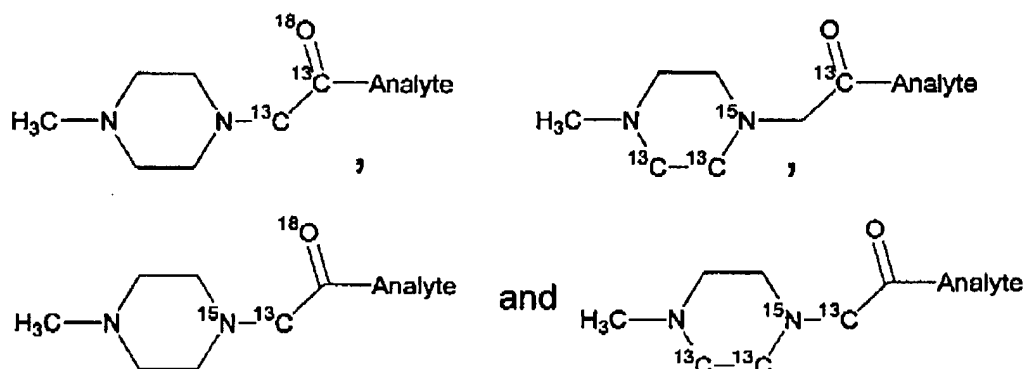


wherein the fragment ions ~~all ion fragments~~ are either positively or negatively charged.

8. (Original) The mixture of claim 7, wherein the analyte is a peptide.
9. (Original) The mixture of claim 7, wherein the analyte is a protein.
10. (Original) The mixture of claim 7, wherein the analyte is a nucleic acid.
11. (Original) The mixture of claim 7, wherein the analyte is a carbohydrate, lipid or steroid.
12. (Original) The mixture of claim 7, wherein the analyte is a small molecule with a molecular weight of less than 1500 daltons.

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13. (Original) The mixture of claim 7, wherein the fragmentation and further analysis produces at least two signature ions of the molecular formula selected from the group consisting of:  $^{13}\text{CC}_5\text{H}_9\text{N}_2^+$ ,  $^{13}\text{CC}_5\text{H}_{13}^{15}\text{NN}^+$ ,  $^{13}\text{C}_2\text{C}_4\text{H}_{13}^{15}\text{NN}^+$  and  $^{13}\text{C}_3\text{C}_3\text{H}_{13}^{15}\text{NN}^+$ .
14. (New) A mixture comprising fragment ions derived by fragmentation of the same analyte labeled with two or more different isobaric labels, wherein ions of the labeled analytes were selected for fragmentation and further analysis in a mass spectrometer, and wherein at least two of the labeled analytes are compounds of a formula selected from the group consisting of:



wherein the fragment ions are either positively or negatively charged.

15. (New) The mixture of claim 14, wherein the analyte is a peptide.
16. (New) The mixture of claim 14, wherein the analyte is a protein.
17. (New) The mixture of claim 14, wherein the analyte is a nucleic acid.
18. (New) The mixture of claim 14, wherein the analyte is a carbohydrate, lipid or steroid.
19. (New) The mixture of claim 14, wherein the analyte is a small molecule with a molecular weight of less than 1500 daltons.

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20. (New) The mixture of claim 14, wherein the fragmentation and further analysis produces at least two signature ions of the molecular formula selected from the group consisting of:  $^{13}\text{CC}_5\text{H}_{13}\text{N}_2^+$ ,  $^{13}\text{CC}_5\text{H}_{13}^{15}\text{NN}^+$ ,  $^{13}\text{C}_2\text{C}_4\text{H}_{13}^{15}\text{NN}^+$  and  $^{13}\text{C}_3\text{C}_3\text{H}_{13}^{15}\text{NN}^+$ .